

Interstate 680 Sunol Grade SMART Lanes Project Alameda County & Santa Clara County, California

SMART LANE DESIGN AND TECHNOLOGY

Vehicle with transponder Enforcement area on windshield located downstream of toll reader enforcement. Police inspect reader to determine whether toll paid or violation occurred striping.

he SMART Carpool Lane will use fully-automated toll collection for single-occupant vehicles-the same technology as the FasTrak toll collection system now used on the eight San Francisco Bay Area bridges. Users will have transponders on their vehicle windshields that register their passage under a toll reader, and their accounts will be charged. Variable message signs will announce the toll amounts, which will vary with the level of congestion. Carpools and buses will continue to ride for free.

> Enforcement will be done through a combination of enhanced highway patrol and video surveillance. Video cameras will be placed at several locations along the corridor. New technology will be implemented to assist law

> The I-680 SMART Carpool Lane will be separated from the adjacent mixed-flow lanes by two sets of double yellow-striped lines not by a physical, concrete barrier. Similar to HOV lanes in Southern California, legal access to the lanes will be limited to designated locations along the 14-mile corridor, delineated by breaks in the

If this demonstration project proves successful, it may be replicated elsewhere. Compared to adding freeway lanes or physical barriers between lanes, this traffic solution is relatively inexpensive. It provides maximum flexibility and does not require the high capital costs associated with constructing physical barriers to separate the lanes.